said setting data is recorded in a detachable memory card and said setting data recorded in said memory card is received in said receiving step.--

Please add the following claims 19-20:

--19. (New) The data recorder-reproducer according to claim 4 wherein said rewritable storage means is a rewritable flash ROM.--

--20. (New) The data recorder-reproducer according to claim 7 wherein said setting data is used to set a first one of said input/output processing means to a second one of said input/output processing means.--

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Claims 1-18 were pending in this application. By the present Amendment, Claims 1-18 are amended and Claims 19-20 are added.

Claims 1-18 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,324,334 B1 ("Moriaka"). Applicants respectfully submit that all claims in this application, at least in the form amended herein, are patentable over Moriaka for at least the following reasons:

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Patentability of Claims 1-3 and 10-12

Considering amended Claim 1, it is submitted that Moriaka does not disclose or suggest a data recorder-reproducer that includes at least the following elements:

> "interface means for receiving bit map data externally supplied from a network or memory card; and

> superimposing processing means for superimposing said bit map data received by said interface means upon the data output from said recording medium or said input data."

Moriaka teaches a recording/reproducing apparatus that records and reproduces hybrid data; however, that apparatus is not equipped to receive externally supplied bit map data from a network or memory card for superimposition with audio/video data. Rather, the only bit map data that might be provided is generated in the apparatus itself. That is, the operator of the apparatus generates text data which then may be superimposed with video data – the text data is not received from a memory card or network.

It is noted that the Office Action cited col. 18, lines 34-42 for disclosing the use of an Ethernet network. It is submitted, however, that this passage relates to the use of an Ethernet network *to enable the user to transmit hybrid data already formed in the apparatus, not to receive bit map data to be superimposed.* More specifically, the apparatus in Morioka is geared for a journalist in the field to record comments on the video on the video recording spot and then transmit both of these to a broadcasting station, i.e., to transmit the hybrid data. See col. 8, lines 39. Thus, one skilled in the art would understand the use of the network connection to the Morioka apparatus is merely to enable a high speed transmission of that hybrid data. That is, contrary to Applicants' claims, the network connection is not provided to receive bit map data over a network to be superimposed with audio/video.

Further, the Office Action relied on the floppy disk drive apparatus disclosed at col. 22, lines 59-65 for disclosing a detachable memory card in which the bit map data recorded in the

memory card is taken in by inserting the memory card into take-in means. Applicants submit that this reasoning is unsound for a number of reasons. First, a floppy disk does not rise to the level of a memory card. It is well known that a memory card does not require mechanical movement whereas a floppy disk does. Second, and perhaps more significantly, the floppy disk drive in Moriaka is only mentioned *as a possible replacement for the hard disk drive*, which was relied upon for equivalence to Applicants' claimed recording medium for storing audio/video data. That is, even if the floppy disk drive embodiment were used, *it would not be used to deliver bit map data to* Moriaka's apparatus; rather, it would be used to store video data. Thus, even with Moriaka's possible substitution of the hard disk drive with a floppy disk drive, Moriaka's device would still not receive externally supplied bit map data – *the text data would still be generated internally*.

Accordingly, in light of the above differences, it is readily apparent that the invention recited in Applicants' Claim 1, at least in the form amended herein, is not anticipated by Moriaka.

Patentability of Claims 4-6, 13-15 and 19

Independent Claim 4, as amended, claims a data recorder-reproducer that includes:

"rewritable storage means for storing a first control program which is used for processing by at least one of said plural input/output processing means;

interface means for receiving an externally supplied second control program which is used for processing by said at least one of said plural input/output processing means; and

rewriting means for rewriting said first control program stored in said storage means into said second control program received by said interface means."

By contrast, it is contended that Moriaka does not disclose or suggest the concept of *receiving an externally supplied second control program* which is used for processing by one of a plurality of input/output processing means; and *rewriting a first control program stored in a*

rewritable storage means into the received second control program. To this end, the Office

Action relied upon the DVC/PCI I/F 6 and col. 7, lines 11-25 as well as col. 7, line 61 to col. 8,

line 5. It was asserted that the DVC Movie Camera 11 is:

> "an external device which, through the control signals processes audio, video and
> auxiliary data which is transmitted through the DVC/PCI I/F 6 to the PCI bus 5 and
> finally recorded in the Data recording HDD 8 via the SCSI-I/F 7 interface means".

That the DVC Movie Camera may supply control *signals* associated with the audio, video

and auxiliary data is immaterial to Applicants' invention of amended Claim 4, which requires

that a first control program, which is stored within the data recorder-reproducer (which is not

claimed as being within an external device), is effectively rewritten into a second control

program that is received by the data recorder-reproducer apparatus. Significantly, these control

programs (first and second) are programs used for processing by the at least one input/output

processing means, where the input/output processing means are part of the data recorder-

reproducer apparatus. Accordingly, it should be readily apparent that the mere transmission of

control signals from Moriaka's DVC Movie Camera, where such control signals are merely

associated with the accompanying video/audio data, does not constitute a *rewriting* of a control

program used in the receiving device.

Accordingly, in light of the above distinctions, Claim 4 is not anticipated by Moriaka.

For analogous reasons, independent method Claim 13 is not anticipated by Moriaka.

The claims depending from Claims 4 and 13 are patentable based at least upon their

respective dependencies therefrom.

In addition, by way of example, new Claim 19 depends from Claim 4 and claims that the

rewritable storage means is a rewritable flash ROM. It is submitted that Moriaka does not

disclose or suggest rewriting a first control program stored in a flash ROM into a second control

program received by the apparatus.

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Patentability of Claims 7-9, 16-18 and 20

Contrary to independent Claim 7, as amended, it is submitted that Moriaka does not disclose or suggest a data recorder-reproducer having plural input/output processing means, that includes:

"interface means for *receiving externally supplied setting data which is used to set at least one of said plural input/output processing means*; and

setting changing means for *changing settings corresponding to said at least one input/output processing means based on said setting data received* by said interface means." (emphasis added)

The Office Action relied upon col. 19, line 37 to col. 20, line 11 and col. 20, line 45 et seq. as disclosing setting changing means, wherein the Examiner stated that the edit processing means of Moriaka is a setting changing means.

It is submitted that the Examiner has not appreciated the significance of Applicants' claim language (which has been amended herein for clarity). Claim 7, as amended, claims that externally supplied setting data is received that is used to set at least one of plural input/output processing means. By contrast, the Examiner has not referred to any such reception of externally supplied setting data in the Moriaka system. That is, even if Moriaka's edit processing results in changing of settings, as the Examiner asserts, this does not amount to any reception of externally supplied setting data. Rather, the setting data used for editing is generated internally by Moriaka's editing processing means.

Accordingly, in light of the above distinction, it is manifest that Claim 7, at least in the form amended herein, is not anticipated by Moriaka.

Independent method Claim 16 is not anticipated by Moriaka for analogous reasons.

The claims depending from Claims 7 or 16 are patentable over Moriaka based at least upon their dependencies therefrom.

Further, by way of example, new Claim 20 claims that the setting data is used to set a first one of said input/output processing means to a second one of said input/output processing means. It is submitted that this feature is neither disclosed nor suggested by Moriaka.

Conclusion

In light of the foregoing, entry of this Amendment, and the allowance of this application with Claims 1-20, are respectfully solicited.

The above statements concerning the disclosures in the cited references represent the present opinion of Applicant's representative and, in the event that the Examiner disagrees, Applicant's representative respectfully requests the Examiner specifically indicate those portions of the references providing the basis for a contrary view.
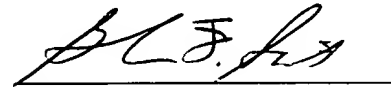
It is submitted that the claims in this application, as originally presented, are patentably distinct over the prior art cited by the examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. 112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes are made for clarification and to round out the scope of protection for the invention.

Attached hereto is a marked-up version of the changes made to the claims and specification by the current amendment. The attached page is captioned **"Version With Markings to Show Changes Made."**

In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicant's representative at the telephone number written below.

Respectfully submitted,
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<u>VERSION WITH MARKINGS TO SHOW CHANGES MADE</u>

<u>IN THE SPECIFICATION:</u>

The paragraph bridging pages 3 and 4 has been amended as follows:

--Besides, it is considered that if it is possible, in a video server, to update software without replacing a ROM for instance, the version-up of software [cab] <u>can</u> be easily performed with preventing any accident that might occur during the replacement of ROM. In addition, it is considered that if it is possible to change the settings without the input work for each set value for instance, the usability can be improved because the complicated setting works can be avoided.--

The paragraph bridging pages 10 and 11 has been amended as follows:

--The RAID 12 is mainly composed of a data processor 9G, and HHDs 7A to 7K. As shown in Fig. 2, the HDDs 7A to 7I store video data and the HDDs 7J, 7K store audio data. Here, the HDDs 7A to 7I each has the RAID-3 structure, and the HDD 7I stores parity data and the other HDDs 7A to 7H store video data so as to improve redundancy. In addition, the HDDs 7J and 7K each has a so-called RAID-1 structure and also a mirror structure in [wchich] <u>which</u> the same audio data is stored in both the HDDs 7J and 7K.--

The first full paragraph on page 13 has been amended as follows:

By referring <u>to</u> this file system, it can be [understand] <u>understood</u> in detail an area where a file has been recorded, or where a file should be recorded.--

The first full paragraph on page 28 has been amended as follows:

--Furthermore, according to the present invention, in the data recorder-reproducer which records and reproduces input video data in a disc recording medium which can be accessed at random and a setting data processing method of the data recorder-reproducer, setting data supplied from the external is taken in and the corresponding setting of [to] the input/output processing means is changed based on the setting data, so that various settings can be easily changed. Thus, the data recorder-reproducer which can significantly improve its usability and the setting data processing method of the data recorder-reproducer can be realized.--

In the Claims:

Claims 1-18 have been amended as follows:

--1. (Amended) A data recorder-reproducer comprising a recording medium which can be accessed at random and plural input/output processing means for processing input data including video and/or audio data and outputting and recording [them] <u>said input data</u> in said recording medium and for processing and outputting data reproduced from said recording medium, in which said plural input/output processing means access said recording medium within respectively allotted time slot<u>s</u> [duration] to input and output said data, said data recorder-reproducer comprising:

[taking-in means for taking in bit map data input from the external] <u>interface means for receiving bit map data externally supplied from a network or memory card</u>; and

superimposing processing means for superimposing said bit map data [taken in] <u>received</u> by said [taking-in] <u>interface</u> means upon the data output from said recording medium or said input data.--

--2. (Amended) The data recorder-reproducer according to claim 1, wherein said bit map data is input to said [taking-in] interface means through an Ether-network.--

--3. (Amended) The data recorder-reproducer according to claim 1, wherein

said bit map data is recorded in a detachable memory card and said bit map data recorded in said memory card is [taken in] received by inserting said memory card into said [taking-in] interface means.--

--4. (Amended) A data recorder-reproducer comprising a recording medium which can be accessed at random and plural input/output processing means for processing input data including video and/or audio data and outputting and recording [them] said input data in said recording medium and for processing and outputting data reproduced from said recording medium, in which said plural input/output processing means access said recording medium within respectively allotted time slots [duration] to input and output said data, said data recorder-reproducer comprising:

rewritable [storing] storage means for storing a first control program [data] which is used for processing [of] by at least one of said plural input/output processing means;

[taking-in means for taking in second control program which is input from the external and] interface means for receiving an externally supplied second control program which is used for processing [of] by said at least one of said plural input/output processing means; and

rewriting means for rewriting said first control program [data] stored in said [storing] storage means into said second control program [data taken in] received by said [taking-in] interface means.--

--5. (Amended) The data recorder-reproducer according to claim 4, wherein

said first control program data is input to said [taking-in] interface means through an

Ether-network.--

--6. (Amended) The data recorder-reproducer according to claim 4, wherein

said second control program data is recorded in a detachable memory card and said

second control program data recorded in said memory card is [taken in] received by inserting

said memory card into said [taking-in] interface means.--

--7. (Amended) A data recorder-reproducer comprising a recording medium which can

be accessed at random and plural input/output processing means for processing input data

including video and/or audio data and outputting and recording [them] said input data in said

recording medium and for processing and outputting data reproduced from said recording

medium, in which said plural input/output processing means access said recording medium

within respectively allotted time slots [duration] to input and output said data, said data recorder-

reproducer comprising:

interface means for receiving externally supplied [taking-in means for taking in] setting

data which is [input from the external and is previously given in processing of] used to set at

least one of said plural input/output processing means; and

setting changing means for changing settings corresponding to said at least one

input/output processing means based on said setting data [taken in by said taking-in] received by

said interface means.--

--8. (Amended) The data recorder-reproducer according to claim 7, wherein

said setting data is [taken in] received by said [taking-in] interface means through an

Ether-network.--

--9. (Amended) The data recorder-reproducer according to claim 7, wherein

said setting data is recorded in a detachable memory card and said setting data recorded

in said memory card is [taken in] received by inserting said memory card into said [taking-in]

interface means.--

--10. (Amended) A bit map data processing method of a data recorder reproducer

comprising a recording medium which can be accessed at random and plural input/output means,

in which said input/output processing means process input data including video and/or audio data

and outputs and records [them] said input data in said recording medium within [the]

respectively allotted time slots [duration] and moreover, [inputs said] processes and outputs data

reproduced from said recording medium within [said] allocated time slots[duration and processes

and outputs said input data], said bit map data processing method [of said data recorder-

reproducer] comprising the steps of:

[a first step of taking in bit map data input from the external] receiving bit map data

externally supplied from a network or memory card; and

[a second step of] superimposing said received bit map data [taken in by said first step]

upon data output from said recording medium or data input to said input/output processing

means.--

--11. (Amended) The bit map data processing method of the data recorder reproducer according to claim 10, wherein

said bit map data is [taken in by said first step] received through an Ether-network.--

--12. (Amended) The bit map data processing method of the data-recorder reproducer according to claim 10, wherein

said bit map data is recorded in a detachable memory card and said bit map data recorded in said memory card is received in said receiving step[taken in by said first step].--

--13. (Amended) A control program data processing method of a data recorder-reproducer comprising a recording medium which can be accessed at random and plural input/output means, in which said input/output processing means process input data including video and/or audio data and outputs and records [them] said input data in said recording medium within [the] respectively allotted time slots [duration] and moreover, [inputs said] processes and outputs data reproduced from said recording medium within [said] allocated time slots [duration and processes and outputs said input data], said control program data processing method [of said data recorder reproducer] comprising the steps of:

[a first step of] storing a first control program [data] which is used for processing of said plural input/output processing means in a rewritable [storing] storage means;

[a second step of taking in] receiving an externally supplied second control program [data which [is input from the external and] is used for processing [of] by said plural input/output processing means;

[a third step of] rewriting said first control program data stored in said storing means into said second control <u>program received in said receiving</u> [programs data taken in by said first] step; and

[a fourth step of] processing said data which is input/output to/from said input/output processing means based on said second control program [data stored by said third step].--

--14. (Amended) The control program data processing method of the data recorder-reproducer according to claim 13, wherein

said second control program [data is taken in by said first step] <u>is received</u> through an Ether-network.--

--15. (Amended) The control program data processing method of the data recorder-reproducer according to claim 13, wherein

said second control program [data] is recorded in a detachable memory card and said second control program [data] recorded in said memory card is <u>received in said receiving</u> [taken in by said first] step.--

--16. (Amended) A setting data processing method of a data recorder reproducer comprising a recording medium which can be accessed at random and plural input/output means, in which said input/output processing means process input data including video and/or audio data and outputs and records [them] <u>said input data</u> in said recording medium within [the] respectively allotted time slot<u>s</u> [duration] and moreover, [inputs said] <u>processes and outputs</u> data reproduced from said recording medium within [said] <u>allocated</u> time slot<u>s</u> [duration and

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processes and outputs said input data], said setting data processing method [of said data recorder-reproducer] comprising the steps of:

[a first step of taking in] receiving externally supplied setting data which is [input from the external and is previously given in processing] used to set at least one of said plural input/output processing means;

[a second step of] changing settings corresponding to said at least one input/output processing means based on said setting data [taken] received in [by] said [first] receiving step; and

[a third step of] processing said data which is input/output to/from said input/output processing means based on said setting data.--

--17. (Amended) The setting data processing method of the data recorder-reproducer according to claim 16, wherein

said setting data is [taken in by said first step] received through an Ether-network.--

--18. (Amended) The setting data processing method of the data recorder-reproducer according to claim 16, wherein

said setting data is recorded in a detachable memory card and said setting data recorded in said memory card is [taken] received in [by] said [first] receiving step.--